

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name:	Calcium Formate
Other names or synonyms:	Calcium diformate; Calcoform; Formic acid, calcium salt.
Recommended uses:	1) Animal feeds: as feed additive, silage preservation agents, etc. 2) Chemistry: as pH-regulator, processing aid, intermediate, etc. 3) Construction materials: as concrete additive. 4) Fertilizer: as additive and raw material. 5) Dyestuffs and pigments: as brighteners. 6) Leather and textiles: as tanning agent. 7) Other industries: in making dyes, glues and adhesives, sealants etc.
Restrictions on use:	Please consult your regulatory authorities for any restrictions on use of this product.
Company name:	Nexchem Ltd Unit 3 Barshaw Park Leycroft Road Leicester LE4 1ET Tel: 0116 2311130 24/7 Emergency Tel: 0800 246 1274 Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Hazard classification: Causes serious eye damage, Category 1, H318



GHS Pictograms:

Signal word: Danger

Hazard statements: H318 Causes serious eye damage.

Precautionary statements:

Prevention: P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.

Storage: Not applicable

Disposal: Not applicable

Other Hazards: Not classified as other hazards.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/preparation:	Substance
Ingredient:	Calcium Formate
Formula:	Ca (HCOO) 2
CAS number:	544-17-2
EC number:	208-863-7
REACH registration number:	Final REACH registration: 01-2119486476-24-0011

4. FIRST AID MEASURES

Skin:	Take off contaminated clothing, flush skin with plenty of water and soap.
Eyes:	Rinse cautiously with tempered water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
Ingestion:	Rinse mouth with water and drink water. If large amount been ingested get medical advice/attention.
Inhalation:	Move to fresh air. Rinse mouth with water. If irritation persists get medical advice/attention.
Symptoms and effects:	SKIN: Not a skin irritant. EYE: Stinging, tearing, redness, pain. INHALATION: Coughing, sneezing, etc. IINGESTION: Vomiting, nausea, etc.
Advice to doctor:	No special antidote. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media:	This product does not burn or support combustion. Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing agents:	Water with full jet.
Hazards:	This product is non-flammable but in case of fire, oxides of carbon and calcium can be released.
Advice for fire-fighters:	Wear a self-contained breathing apparatus with full protective clothing in case of fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear tightly sealed goggles, protective gloves and if dusty conditions dust filter mask. Ensure adequate ventilation.
Environmental precautions:	Prevent entry into sewers or streams and other water bodies.
Disposal methods:	Cover to prevent dust formation. Use appropriate tools to put the spilled material into a sealed container and hold for reuse or later disposal. Clean the affected area carefully with water.

7. HANDLING AND STORAGE

Handling:	Avoid breathing dust. Avoid contacting skin, eyes and clothing. Use with adequate ventilation. No smoking, eating and drinking water at workplace. Avoid prolonged or repeated exposure.
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Storage: No special requirements. Store in dry place. Keep away from high temperature, moisture, incompatible materials and avoid physical damages.

Precautions: Please pay attention to section 10 conditions to avoid and incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

CHINA GBZ 2.1-2007: No data for Calcium Formate.

OSHA PEL: Not available.

ACGIH TLV: Not available.

Engineering controls: Use adequate exhaust ventilation to keep airborne concentrations below the allowable exposure limits.

Respiratory protection: Dustproof respirators when dusts are generated.

Hand protection: Protective gloves, leather, rubber or plastic.

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Resistant protective clothing.

Hygiene precautions: No smoking, eating and drinking water at workplace. Washing hands before eating. Taking bath after work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid white or slightly yellowish-white crystal or crystalline powder.

Odour: Slightly acidic.

Odour Threshold: Not applicable.

pH value: 6.0-7.5 (10% aqueous solution)

Melting/freezing point:

Melting point: >300°C (OECD 102)

Boiling point: Not relevant; the sample decomposes before boiling.

Flash point: Not applicable

Evaporation rate: Not applicable to solids.

Flammability: No flammability, explosiveness or auto in flammability properties.

Upper/lower flammability or explosive limits: Not applicable

Vapour pressure: 2.2×10^{-4} Pa (calculation, 25°C)

Vapour density: Not applicable

Relative density: 2g/cm³ (ISO 1183-1); 1000~1200kg/m³ (bulk density)

Solubility: 172 g/L (OECD 105)

Partition coefficient: (n-octanol/water) -2.6 log POW (OECD 107)

Auto-ignition temperature: Not applicable

Decomposition temperature: 408°C (OECD 102)

Viscosity: Not relevant

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10. STABILITY AND REACTIVITY

- Reactivity:** Dangerous reactions are not expected under ambient and anticipated temperature and handling conditions of temperature and pressure.
- Chemical stability:** Stable under ambient and anticipated temperature and handling conditions of temperature and pressure.
- Possibility of hazardous reactions:** No polymerization will occur. No dangerous reactions known.
- Conditions to avoid:** High temperatures, moisture.
- Incompatible materials:** Strong oxidizing agents.
- Hazardous decomposition products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, calcium oxide.

11. TOXICOLOGICAL INFORMATION

- Acute toxicity:** Oral LD50: 3050 mg/kg (rat) (OECD 401)
Dermal LD50: >2000 mg/kg (rat) (OECD 402)
Inhalation LC50/4h: >0.67 mg/l (rat) (EPA OTS 798.1150)
- Skin irritation/corrosion:** No irritating effect.
- Eye damage/irritation:** Causes serious eye damage.
- Respiratory or skin sensitisation:** No skin sensitisation.
- Germ cell mutagenicity:** Not mutagenic.
- Carcinogenicity:** Not listed as a suspected / confirmed carcinogen by IARC, NTP.
- Production toxicity:** Reports show no adverse effect on reproduction.
- STOT-single exposure:** No experimental or epidemiological sufficient evidence for specific target organ toxicity (single exposure).
- STOT-repeated exposure:** No experimental or epidemiological sufficient evidence for specific target organ toxicity (repeated exposure).
- Aspiration hazard:** Not available.
- Routes of entry:** Eye contact.
- Chronic exposure:** No information available.
- Other information:** No more information available.

12. ECOLOGICAL INFORMATION

- Toxicity:** LC0/96h: >1000 mg/l (fish); LC0/48h: >1000 mg/l (fish); EC50/3h: >10000 mg/l (bacteria);
This product is not regarded as dangerous for environment.
- Persistence and biodegradability:** The product is readily biodegradable.
BOD28: 86% (-) (OECD 306); BOD28/COD: >75 % (OECD 301)
- Bio-accumulative potential:** Do not bio-accumulate or bio-magnify.
- Mobility in soils:** The substance is not expected to adsorb to a high degree to suspended solids and sediment based upon the log Koc which indicates a moderate to high mobility in soil. Log Koc 1.49 (-)
- Results of PBT and vPvB assessment:** Not applicable.
- Other adverse effects:** No more information available.

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13. DISPOSAL CONSIDERATIONS

Methods of disposal: Dispose of in accordance with all government regulations. Avoid release to the environment.

Contaminated packaging: Dispose of the packaging in accordance with all government regulations.

14. TRANSPORT INFORMATION

IMDG: NOT Regulated as Dangerous Goods.

UN No.:

Hazard Class:

Packing Group:

Marine Pollutant:

Proper Shipping name:

Pictograms:

ADR/RID: NOT Regulated as Dangerous Goods.

UN No.:

Hazard Class:

Packing Group:

Proper Shipping name:

ITAT: NOT Regulated as Dangerous Goods.

UN No.:

Hazard Class:

Packing Group:

Proper Shipping name:

15. REGULATORY INFORMATION

China: GB 12268-2005 List of Dangerous goods: Not regulated.

List of Acute Toxic Chemicals (2002): Not regulated.

List of Severely Restricted Toxic Chemicals for Export and Import: Not regulated.

Other countries: Please refer to any applicable national regulations on the hazard and safety of this product.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Training advice: Provide adequate information, instructions and training for operators.

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Legal disclaimer:

The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.